

Dengue Fever (DF)

Prepared By

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Overview:¹

<i>Vectors and Pathways:</i>	Mosquito bites by <i>Aedes aegypti</i> or <i>Aedes albopictus</i>
<i>Symptoms:</i>	Severe headache, pain in eyes, joints, muscles/bones, rash
<i>Risks:</i>	Hemorrhagic manifestations, circulatory failure or shock, internal bleeding, and in the worst cases death
<i>Causing Organisms:</i>	Four viruses, serotypes dengue 1-4
<i>When symptoms begin:</i>	4-7 days after bite
<i>How long symptoms last:</i>	3-10 days
<i>When mosquito acquires virus:</i>	5-day period when human host carries large amounts of virus in their blood, preceding symptoms
<i>How long virus must incubate:</i>	8-12 days inside mosquito (before becoming transmissible)

Ecology:



Figure 1. *Aedes aegypti* was eradicated from the Hawaiian Islands in 1949, but was rediscovered in 2012 at Honolulu Airport.



Figure 2. Plants that collect water in their leaves like these bromeliads provide ideal mosquito breeding habitat.

Table 1. Estimated burden of dengue in millions in 2010, by continent or region.²

Continent	Apparent	Inapparent
Africa	15.7	48.4
Asia	66.8	204.4
Americas	13.3	40.5
Oceania	0.18	0.55
Total	96	293.9

Citations:

¹ Dengue Homepage. Centers for Disease Control and Prevention. Jul 13 2015. <http://www.cdc.gov/dengue/epidemiology/index.html>

² Bhatt, S., Gething, P. W., Brady, O. J., Messina, J. P., Farlow, A. W., Moyes, C. L., ... Hay, S. I. (2013). The global distribution and burden of dengue. *Nature*, 496(7446), 504–507. doi:10.1038/nature12060